

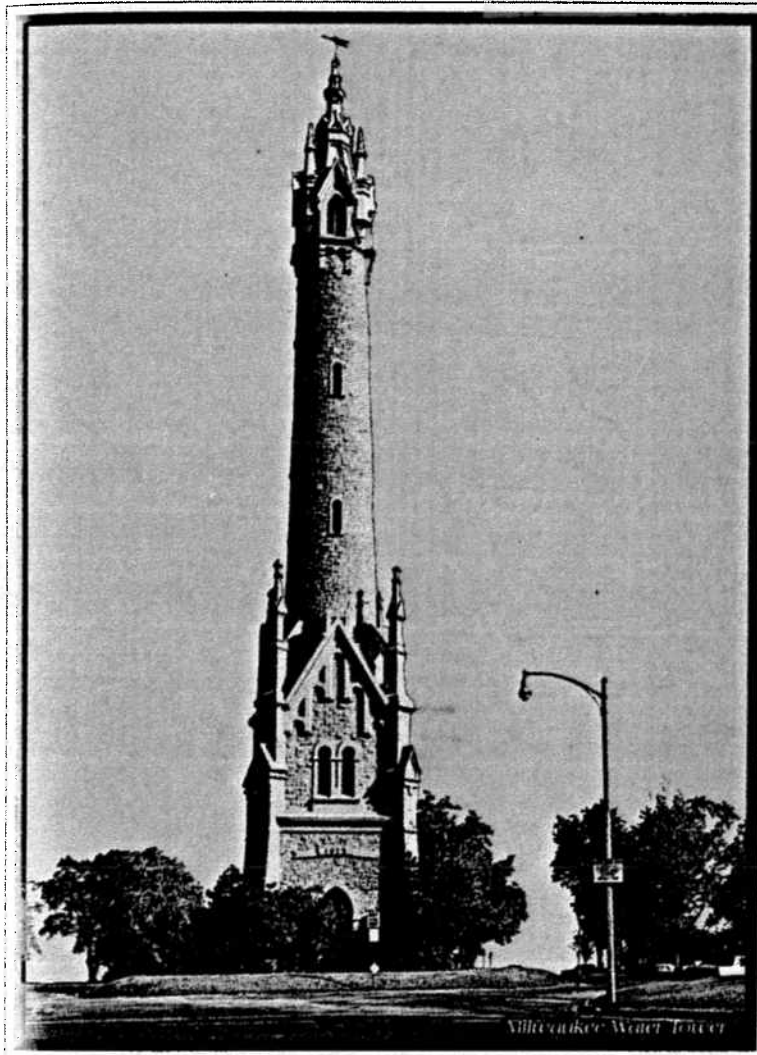
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A CENTURY OF MILWAUKEE WATER

An Historical Account of the Origin and Development
Of the Milwaukee Water Works

By

Elmer W. Becker

*Former Superintendent
Milwaukee Water Works*

1964-1972

Milwaukee, Wisconsin

1974

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GLOSSARY

MGD	- million gallons per day
PPM	- parts per million
PSI	- pounds per square inch
MGPP	- million gallons per day
GPD	- gallons per day
FT. LBS.	- foot pounds
MG	- million gallons
PSIG	- pounds per square inch gravity



PREFACE

During my forty-seven years of employment as Civil Engineer, Assistant and Superintendent and, finally, Superintendent of the Milwaukee Water Works, my thoughts were directed to the course of events that required my attention for the construction and operation of the system.

After my retirement, it was suddenly made clear to me that a history of the Milwaukee Water Works had never been written and, therefore, I should try to record a series of events that had occurred during the first one hundred years of this utility's existence. After all, I had been employed there nearly one-half of the time.

This volume contains information regarding significant events that have occurred in the first one hundred years of construction and development of the Milwaukee Water Works. Today, the Milwaukee Water Works serves with the highest standards and efficiency of operation.

I hope that a reading of this volume will be an inspiration to many employees who are presently and will hereafter be employed in the operation of this water utility.

It has been my pleasure to make the acquaintance and friendship of many fine employees whom I have worked with during my years with the Milwaukee Water Works. It has also been my pleasure to work under five Milwaukee Mayors; namely, Daniel W. Hoan, Carl F. Zeidler, John L. Bohn, Frank P. Zeidler and Henry W. Maier.

Elmer W. Becker

Water Main Assessments

Because a water main installed in a street, providing water service to private property abutting on that street, is an improvement that raises the value of the property, the City of Milwaukee, through its Board of Water Commissioners, determined that part of the cost of constructing water mains should be borne by property owners. Therefore, beginning in 1872, the first year that water pipe was installed, assessments were made against properties abutting the street where water mains were installed. The policy of making water main assessments has continued throughout the existence of the Milwaukee Water Works and is likely to continue into the future. It would be inequitable to discontinue making water main assessments because in such an event, some property owners would acquire a free improvement while their predecessors had to pay for their water main improvement.

The first assessments were made equivalent to the cost of installing a six-inch water main at 80 cents per front foot of property on each side of the street. Both sides of corner lots were assessed with a deduction of one-third of the length of the long side not to exceed 50 feet. When the water main in the street was larger than six inches in diameter, the assessment was no greater than the cost of a six-inch water main, the water works absorbing the excess cost.

Beginning in 1963, assessments for water mains were made equivalent to the cost of installing an eight-inch water main because thereafter, the minimum size main to be installed in the city would be eight inches in diameter. Possible exceptions would be four-inch mains in short cul de sac streets. Assessments cannot be made greater than the actual cost of installation so when the actual cost of installation is less than the cost of an eight-inch main, the lesser cost is assessed.

Schedule of Water Main Assessments Per Front Foot of Property on Each Side of the Street

Beginning with the first year that water pipe was installed in 1872, the assessment was 80 cents per front foot. Some time thereafter, the assessment rate was reduced to 50 cents per front foot and this rate prevailed until 1913.

Year	Rate	Year	Rate	Year	Rate	Year	Rate	Year	Rate
1913	\$0.615	1924	\$1.49	1935	\$1.02	1946	\$1.80	1957	\$3.90
1914	0.54	1925	1.50	1936	1.30	1947	2.24	1958	4.50
1915	0.525	1926	1.22	1937	1.15	1948	2.24	1959	4.50
1916	0.60	1927	1.25	1938	1.24	1949	2.39	1960	4.65
1917	0.75	1928	1.20	1939	1.19	1950	2.35	1961	4.90
1918	1.22	1929	1.22	1940	1.23	1951	2.35	1962	5.24
1919	1.185	1930	1.18	1941	1.26	1952	2.50	1963	5.75
1920	1.64	1931	0.88	1942	1.26	1953	2.75	1964	5.75
1921	1.40	1932	1.00	1943	1.27	1954	3.25	1965	5.75
1922	1.15	1933	1.23	1944	1.27	1955	3.50	1966	5.75
1923	1.445	1934	1.02	1945	1.30	1956	3.65	1967	5.75

1968	\$5.75	1970	\$7.28	1972	\$7.28	1973	\$7.28	1974	\$7.28
1969	5.75	1971	7.28						

Beginning in 1958, action was taken to apply a suburban assessment rate against properties located outside the city that connect to City of Milwaukee water mains in city border line streets. The suburban rate includes some of the cost of 12-inch and 16-inch water mains.

Suburban Assessment Rate

<u>Year</u>	<u>Rate</u>
1958	\$ 6.55
1959	6.55
1960	6.88
1961	8.19
1962	8.59
1963	7.51
1964	7.51
1965	7.51
1966	7.51
1967	7.51
1968	7.51
1969	7.51
1970	11.13
1971	11.13
1972	11.13
1973	11.13
1974	11.13

Schedule of Water Main Assessments

Amount of assessment levied annually against abutting property for water mains beginning in 1872.

<u>Year</u>	<u>Assessment</u>	<u>Cumulative</u>
1872	\$ 83,310.65	\$ 83,310.65
1873	232,370.04	315,680.69
1874	13,989.33	329,670.02
1875	38,935.04	368,605.06
1876	37,560.00	406,165.06
1877	31,308.03	437,473.09
1878	33,390.66	470,863.75
1879	14,569.54	485,433.29
1880	26,501.46	511,934.75
1881	7,826.67	519,761.42
1882	29,831.79	549,593.21
1883	9,843.03	559,436.24
1884	37,208.91	596,645.15